



THE STAR

Climate-related Disclosures

THE STAR ENTERTAINMENT GROUP

Second Report, June 2021

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1.0 Climate-related Financial Disclosure

1.1 Preamble

The Task Force on Climate-related Financial Disclosures (TCFD) was established in 2015 in response to market and regulatory challenges to produce and obtain information on climate-related risk for financial decision making. Launched in 2017, the TCFD Recommendations are a set of voluntary, consistent climate-related financial disclosures for use by investors, lenders and insurance underwriters to understand material risks.

The Star Entertainment Group (The Star) recognises the recommendations of the TCFD, and importantly that our investments may be susceptible to future changes in climate.

The Star is committed to improving the resilience of its business operations, assets, and the precincts in which its properties are located which is detailed in the Group Sustainability Strategy. The Star is currently working to align our current and new projects to the TCFD Recommendations through a progressive roadmap.

The Star has committed to a low carbon future by setting a target to achieve net-zero carbon emissions for its wholly owned and operated assets by 2030 as a long term measure. The Group remains committed to immediate action through an interim carbon target to achieve a 30% reduction from 2013 – 2023 on an intensity basis.

This is our second disclosure, which reports on FY20 data and FY21 management practices and builds on our progress to date against the four recommendations of Governance, Strategy, Risk Management and Metrics and Targets. The Star released its first disclosure report last year in 2020¹.

¹ The Star's FY20 Climate-related Disclosures progress report can be found on the company website: <https://www.starentertainmentgroup.com.au/wp-content/uploads/2020/12/Climate-Related-Disclosures-2020.pdf>

1.2 Timeline of progress

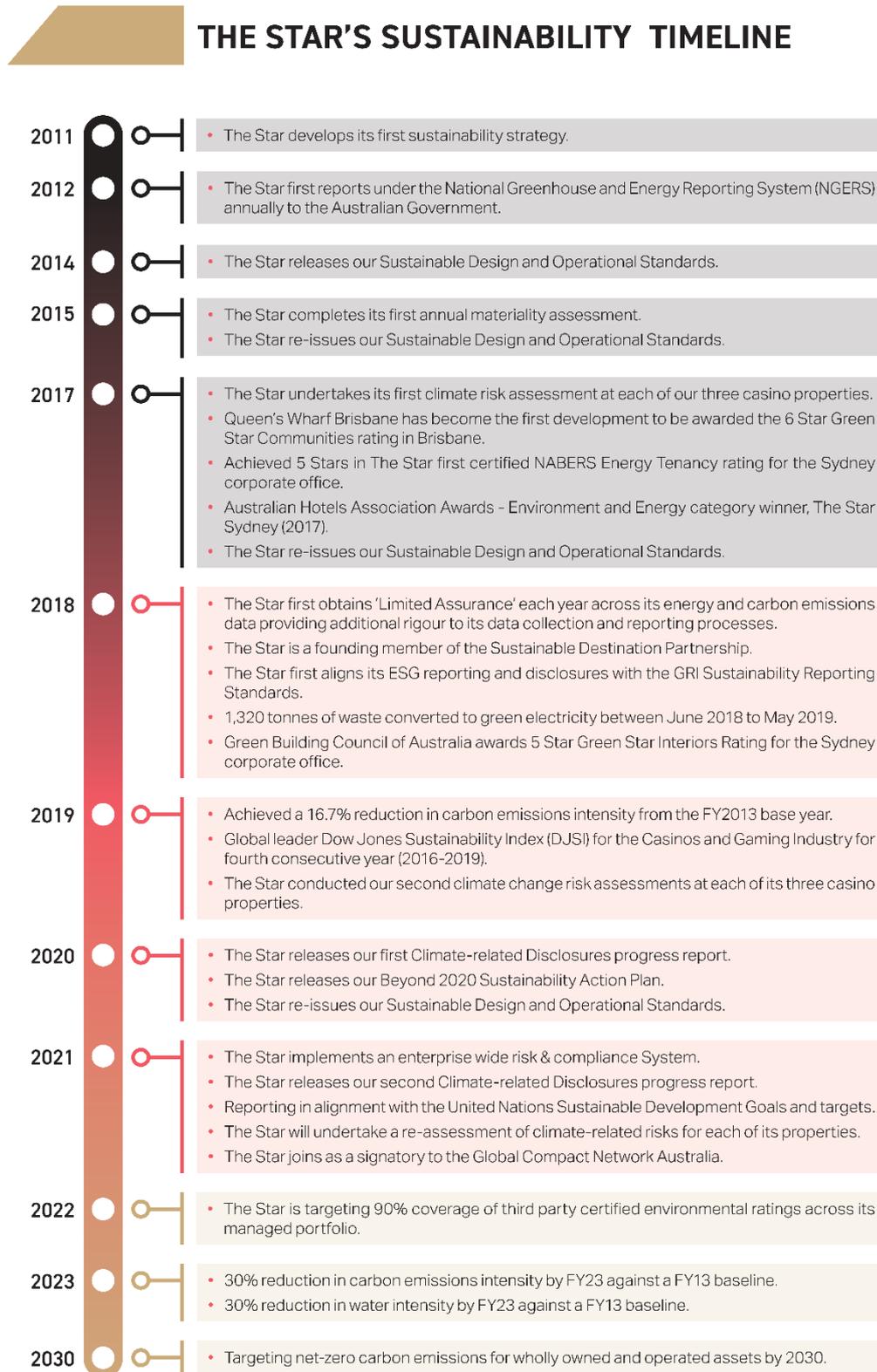


Figure 1 The Star's Sustainability Timeline

1.3 Highlights for FY21

KEY INITIATIVES AND PROGRESS ON DISCLOSURE	STATUS	TCFD alignment
Further development, implementation and disclosure of oversight processes and risk owners for Board and Management, to ensure appropriate accountability of climate-related risks within The Star.	● <i>established - continue and improve</i>	Governance
Disclosure of The Star's transition risks and opportunities and their link to the 2030 net-zero target commitment.	● <i>established - continue and improve</i>	Strategy
Analysis on how the COVID-19 pandemic has impacted The Star's material risks, including resilience.	● <i>established - continue and improve</i>	Strategy
Disclosure of The Star's position on the Sustainable Destination Partnership with the City of Sydney.	● <i>established - continue and improve</i>	Strategy
All of The Star's Capital Projects have a contingency of 20%, in addition, extreme weather events are covered by insurance including those potentially relating to climate hazards.	● <i>established - continue and improve</i>	Strategy
Disclosure of adaptation and mitigation measures across The Star's portfolio, both implemented and planned.	● <i>established - continue and improve</i>	Strategy
Development and implementation of The Star's Risk Management Framework and the Risk & Compliance System.	● <i>established - continue and improve</i>	Risk management
The Star will complete training for the Risk & Compliance system across the organisation.	● <i>established - continue and improve</i>	Risk Management
Analysis of the impact and longevity of COVID-19 on The Star's water, energy and waste consumption and 2023 and 2030 reduction targets.	● <i>established - continue and improve</i>	Metrics & Targets

2.0 Governance

Disclose The Star’s governance around climate-related risks and opportunities.

The Board’s People, Culture and Social Responsibility Committee and Executive Committee maintain oversight of climate-related risks and opportunities. Sustainability and climate change are standard agenda items at the Committee’s quarterly meetings, and they receive regular progress updates towards The Star’s targets.

Other Board Committees may identify a climate-related risk in relation to developments or insurance within their agendas which remain individual agenda items within Committee. The overall strategy for the Group’s climate resilience, mitigation and adaptation (as a material issues) remains with the People, Culture and Social Responsibility Committee. Each Board committee is obligated to redirect risks to the responsible board committee to ensure due diligence and appropriate oversight of The Star’s risks.

The Board is ultimately responsible for the overall risk management strategy at The Star²³. Its Risk and Compliance Committee is responsible for approving the risk appetite statement and Risk Management Framework⁴. The Star’s risk management function is led by the Chief Legal and Risk Officer, who reports directly to the Chief Executive Officer.

In FY21, The Star implemented a new enterprise Risk Management System. This system captures climate-related risks and assigns ownership these risks to the relevant business unit. Line management at each business unit is accountable for their climate-related risks and are responsible for reporting their material risks to Group Legal & Risk who then report directly to the Board People, Culture and Social Responsibility Committee. For detail of the new risk management process please refer to Section 4.0 Risk Management.

The Star also has an established National Sustainability Steering Committee to activate climate-related projects and develop a strategic business approach geared towards sustainability, notably through the reduction of energy use and promoting energy efficiency and using new technology to create ‘world class’ properties⁵. The Committee also recommends metrics and targets, which are submitted for approval to the Board Committees. Initiatives delivered by the Steering Committee and Sustainability Team are overseen by the Executive Management Team with results delivered to the Board and reported externally within The Star’s Annual Report and Director’s Report and on The Star’s website.

TCFD RECOMMENDED DISCLOSURE	STATUS
G1. Describe the Board’s oversight of climate-related risks and opportunities	● <i>established</i> - <i>continue and improve</i>
G2. Describe management’s role in assessing and managing climate-related risks and opportunities	● <i>established</i> - <i>continue and improve</i>

² The Board of Directors continue to have oversight of the Sustainability Strategy as detailed in the Directors Report within the Annual Report page 47-48: <https://www.starentertainmentgroup.com.au/wp-content/uploads/2020/10/2020-Annual-Report.pdf>

³ The Star’s Corporate Governance Statement can be found on the company website: <https://www.starentertainmentgroup.com.au/wp-content/uploads/2020/12/2020-Corporate-Governance-Statement.pdf>

⁴ The Star’s Risk and Compliance Committee Terms of Reference: <https://www.starentertainmentgroup.com.au/wp-content/uploads/2021/01/Risk-and-Compliance-Committee-Terms-of-Reference.pdf>

⁵ The Star’s Beyond 2020, Sustainability Action Plan can be found on the company website: <https://www.starentertainmentgroup.com.au/wp-content/uploads/2021/04/Beyond-2020-The-Stars-Sustainability-Action-Plan.pdf>

Roadmap to further alignment to the TCFD Recommended Disclosures

ACTIONS FOR THE STAR TO UNDERTAKE IN THE NEXT THREE YEARS	RELEVANT TCFD DISCLOSURE(S)	TIMELINE
The Star will continue to strengthen its approach to disclosure and outline how management and the Board monitor and oversee progress against climate-related goals and targets.	G1	FY22
The Star will provide insight into how the Board applies climate-related issues as a consideration for strategy and business planning.	G2	FY22
Review effectiveness of The Star's Risk Management System and governance processes for managing climate-related risks.	G1, G2	FY22

GOVERNANCE OF CLIMATE-RELATED RISKS AND OPPORTUNITIES AT THE STAR

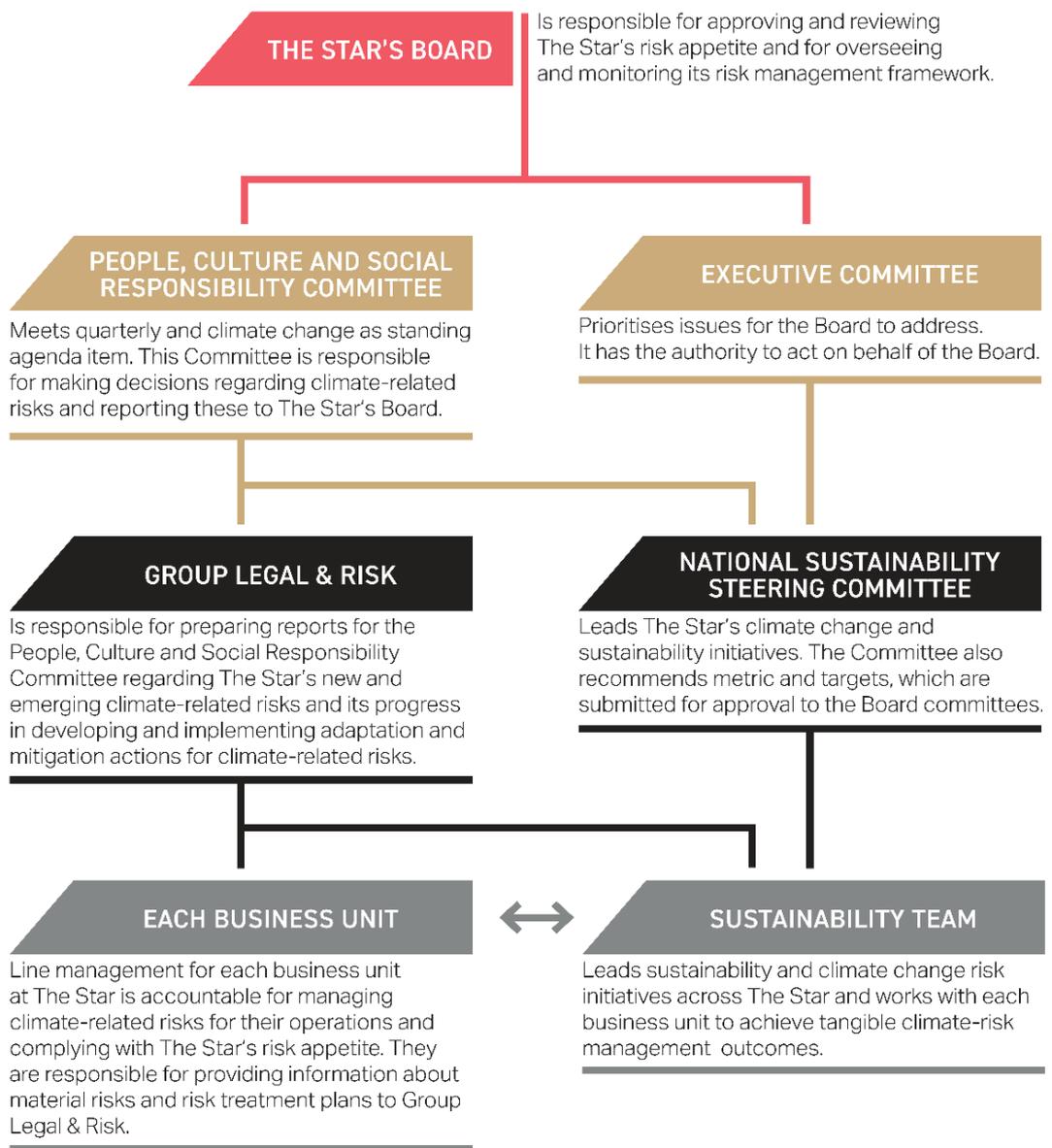


Figure 2 The Star's governance process of climate-related risks and opportunities

3.0 Strategy

Disclose The Star’s actual and potential impacts associated with climate-related risks and opportunities, where such information is material.

In 2017, The Star undertook a climate change risk assessment of its assets and recommended actions to improve its resilience to future climate change. Risks were similar in nature to those found across the built environment. The risk assessment identified exposure to heat and storms across The Star’s three casino properties, and highest overall exposure, aggregated across all potential climate variables, for The Star Brisbane, The Star Gold Coast and The Star Sydney.

This assessment was reviewed and updated in 2019 to include a preliminary assessment of transition risks and opportunities. From a range of plausible scenarios developed by peak climate science and government bodies, the representative concentration pathways (RCPs) - RCP8.5 and RCP2.6 were selected as the most appropriate representative concentration pathways to explore climate-related physical and transition risks (respectively) for The Star. RCP8.5 represents minimal effort to reduce emissions, while RCP2.6 represents strong mitigation efforts with early participation from all emitters followed by active removal of atmospheric carbon dioxide. A detailed overview of physical and transition risks were provided in the first climate disclosure report.

In 2021, The Star will undertake a follow-up climate risk assessment of these properties.

Materiality

‘Climate resilience’ is a material issue to The Star which is identified in The Star’s materiality assessment. The Star conducts annual materiality assessments to identify prominent issues to its assets and operations. ‘Climate resilience’ encompasses climate risk management, minimising carbon emissions and supporting the transition to a net-zero economy. It is an issue that is expected to have a more strategic focus over a three to five-year time horizon.

The Star has embedded ‘climate resilience’ into our business planning through prioritising energy efficiency projects, participation in Destination Stewardship and by having a significant contingency margin on all capital projects for extreme events, including those related to climate hazards.

These assessments are aligned to the relevant requirements of Global Reporting Initiative (GRI), AccountAbility AA1000 Principles Standard and the International Integrated Reporting Council Framework. It also considers the United Nations Sustainable Development Goals (SDGs) and Targets. Refer to The Star Entertainment Group’s Materiality Assessment on the company website.

TCFD RECOMMENDED DISCLOSURE	STATUS
S1. Describe the climate-related risks and opportunities The Star has identified over the short, medium and long term	● <i>established</i> - <i>continue and improve</i>
S2. Describe the impact of climate-related risks and opportunities on the Star’s business, strategy and financial planning	● <i>initiated – develop and implement</i>
S3. Describe the resilience of The Star’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	● <i>established</i> - <i>continue and improve</i>

The Star’s physical climate-related risks

The following table provides an overview of the key physical risks to The Star and details how The Star has, and is planning to respond.

Key risks and related climate hazard	The Star’s response
<p>Extreme heat:</p> <ul style="list-style-type: none"> Increased pressure on cooling and air conditioning, leading to increased operation and maintenance costs and risk of system failure Increased energy and water demand, leading to increased operational costs Reduced network capacity – increase in blackouts Increased heat stress events among stakeholders, with reduced comfort of patrons and guests, tenants, and operations and maintenance staff Increased requirements for cooling and areas of respite, with reduced comfort of patrons and guests, tenants, and operations and maintenance staff 	<p>Completed actions</p> <ul style="list-style-type: none"> Heat is addressed in the Sustainable Design and Operational Standards. The Star Sydney undertook a capital upgrade project to seal parts of the main gaming floor which was completed in June 2020 and is expected to provide tangible energy savings, whilst also improving guest comfort levels. <hr/> <p>Current actions</p> <ul style="list-style-type: none"> Refer to the case study below for information regarding heat For capital replacement of any HVAC facilities, The Star considers the projected increase in extreme heat days and heatwaves over 35°C and maximum mean temperature increase. Bueno, The Star’s building optimisation and analytics platform identifies tuning and efficiency projects, which enhance thermal comfort and reduces energy use. The Star completes energy and water audits biennially to ensure that short and long term efficiency opportunities are costed and presented to the business for implementation. Opportunities are prioritised by capital cost, return on investment, energy and carbon emissions reductions and maintenance savings.
<p>Extreme rainfall:</p> <ul style="list-style-type: none"> Increased local flood events, limiting access and egress, with impacts to transport links Greater intensity of runoff leading to drainage capacity issues for buildings (roof and ground level) Increase in safety issues around stormwater detention basins and channels (areas at risk of localised flooding) 	<p>Completed actions</p> <ul style="list-style-type: none"> Extreme rainfall is addressed in the Sustainable Design and Operational Standards. Implementation of a proactive awareness program for appropriate responses to extreme rainfall and flash flooding events. Regular inspections of stormwater pits and pumps, with maintenance and clearing if required, to prevent overflow and flooding. The Star Sydney has installed a green roof which covers over 8,000 sqm. The green roof reduces storm water runoff and increases water quality. <hr/> <p>Current actions</p>

Key risks and related climate hazard	The Star's response
	<ul style="list-style-type: none"> The stormwater designs for the Queens Wharf, Brisbane precinct have been developed to withstand 1-in-100 year rain events and to allow water to leave the site without impacting the building. Emergency egress paths at the Queens Wharf, Brisbane precinct have been reviewed by an independent certifier to ensure flood events do not compromise emergency exit. The Star has identified one event which would require a manual intervention by redirecting occupants to an alternative exit.
<p>Extreme storms, wind and hail:</p> <ul style="list-style-type: none"> Increase in safety issues for patrons and guests, tenants, and operations and maintenance staff 	<p>Completed actions</p> <ul style="list-style-type: none"> Storm events including wind and hail are addressed in the Sustainable Design and Operational Standards. <hr/> <p>Current actions</p> <ul style="list-style-type: none"> Implementing a proactive awareness program for appropriate responses to extreme rainfall and flash flooding events. Implement an early warning system for storm events for staff, tenants and patrons.
<p>Sea level rise and storm surge:</p> <ul style="list-style-type: none"> Permanent inundation of some areas – limiting access and egress 	<p>Completed actions</p> <ul style="list-style-type: none"> Sea level rise and storm surge are addressed in the Sustainable Design and Operational Standards. <hr/> <p>Current actions</p> <ul style="list-style-type: none"> Investigating the combination of hard and soft defence options to minimise the impact of storm tide inundation and ensure building and infrastructure design accommodates storm tide levels. Flood gates have been built at one of the Queens Wharf's loading dock exit, which is lower than the river flood level for a 1-in-100 flooding event. All rooms that surround, or are enclosed by, the loading dock are elevated above the 1-in-100 flood event level.

The Star's transition risks and opportunities

The Star has identified six key drivers which will influence our transition to a low carbon economy. The diagram below indicates when actions associated by these drivers are expected to impact upon The Star's operations.



THE STAR'S TRANSITION TO A LOW CARBON ECONOMY

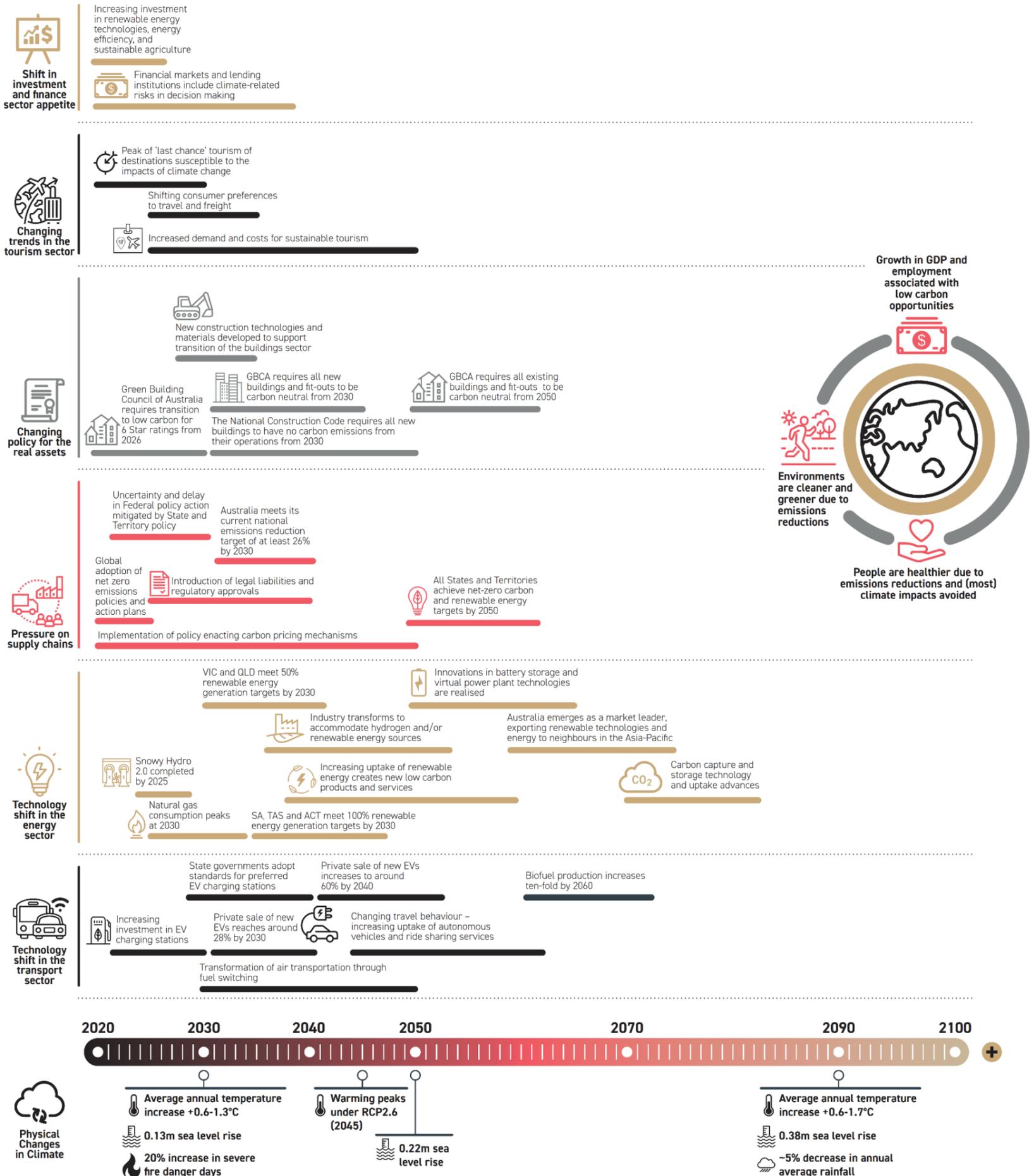


Figure 3 The Star's key drivers and transition to a low carbon economy

Case Study - Destination Stewardship

The Star is a founding partner and active member of Sydney's Sustainable Destination Partnership. The Sustainable Destination Partnership is a collaboration of hotels, backpacker hostels, serviced apartments, cultural institutions and entertainment venues, who are working together to make Sydney a sustainable destination.

The Partnership is one of many actions from the City of Sydney's Making Sydney a Sustainable Destination plan which seeks to reduce the environmental impact of the sector while saving money and attracting new customers. Destination Stewardship aims to maintain cultural, environmental, socio-economic and aesthetic integrity of a place for local residents and visitors through sustainable tourism.

The partnership collaborates to:

- Improve the environmental performance of Sydney's accommodation and entertainment venues
- Invest in renewable energy
- Promote recycled water and reduce potable water consumption
- Promote waste avoidance and increasing recycling
- Create pathways and other sustainable solutions that support Sustainable Sydney 2030
- Promote innovation and the update of new technology
- Engage with regulators and governments on key environmental policy and regulatory issues; and
- Champion and promote the Partnership objectives and outcomes to the broader sector and wider community.

Together with Sustainable Destination Partnership, The Star is working to meet the following climate-related targets by June 2021:

- Reduce total emissions by 10% from a 17-18 baseline
- Increase energy from renewable sources through on-site generation and off-site purchasing.

Through active partnership in Destination Stewardship, The Star will embed its principles and targets into its next Sustainability Strategy in order to promote sustainable tourism and enhance resilience of The Star's assets and operations.

For further information, please refer to the Sustainable Destination Partnership's website: <https://www.sustainabledestinationpartnership.com.au/>

Roadmap to further alignment to the TCFD Recommended Disclosures

ACTIONS FOR THE STAR TO UNDERTAKE	RELEVANT TCFD DISCLOSURE(S)	TIMELINE
Undertake additional physical risk assessments in FY22 and disclose what key climate risks from past assessments will be targeted.	S1, S2, S3	FY22
The Star will use the information gathered from climate risk assessments to determine and disclose how these issues are factored into operational and strategic financial planning. This will also help to prioritise climate-related issues for specific properties, and at an enterprise level.	S2	FY22
The Star will develop greater understanding of the use of climate scenario analysis and how this can inform business strategies and investment decisions.	S2	FY22
Establish watching brief on policy or market sector developments that may influence The Star's response to climate change, including introduction of new regulations or standards for energy use, emissions management, transport or building-specific standards	S2, S3	FY22
Undertake preliminary studies to determine the financial impacts of each risk.	S2	FY22
Develop a framework derived from the physical and transition risk assessments to be applied to business decisions with a value over a certain threshold.	S2	FY22+
Formalise engagement methods to get continuous feedback with key stakeholders including employees, tenants, visitors, supply chain and utility and service providers, with specific intent to address climate-related issues (e.g. annual sustainability survey, provisions within renewal contracts).	S3	FY22+

Case study – Heat respite in Brisbane at Queen’s Wharf



Heat poses significant risks to the customers and communities of The Star’s Brisbane-based assets, including the Queen’s Wharf development. Queen’s Wharf, Brisbane is a \$3.6 billion development to create cultural, retail, dining, hotel, entertainment and tourist attraction spaces over 26 hectares in central Brisbane. It is being delivered by The Star in conjunction with the partners of the Destination Brisbane Consortium.

In order to mitigate the risks of extreme heat for the local community, the Queen’s Wharf, Brisbane development has incorporated the following design features:

- Green walls are a feature throughout the precinct.
- Indoor plants, water features and vertical green walls are included in the interior design of the Rosewood Hotel.
- All of the buildings, including Towers 1-4 and the integrated resort development have been designed to incorporate the principles of sub-tropical design as outlined in Brisbane City Council’s ‘Buildings that Breathe’ Guide.
- The spaces throughout all towers are orientated around the River City Design Concept that reflects and draws attention to natural features such as the river and mountains.
- The development has achieved a 6 Star Green Star Communities Rating and is in the process of attaining 6 Star Green Star Design and As Built Ratings for non-residential buildings and achieving best practice design for existing heritage buildings
- Balconies allow residents and occupants to enjoy the outdoor lifestyle that is associated with the sub-tropics.
- Soft landscaping is provided extensively throughout the outdoor areas of all buildings.

The Queen’s Wharf, Brisbane development is currently achieving the ‘Heat Island Effect’ Credit for the Green Star Communities Rating and has achieved an innovation credit for ‘biophilic design’ through the use of passive cooling measures and providing access to natural light.

Figures 4 & 5 Queens Wharf development design, featuring balconies, soft landscaping and green walls

4.0 Risk Management

Disclose how The Star identifies, assesses and manages climate-related risks.

In 2020, The Star revised the enterprise-wide Risk Management Framework and system. The Star is currently in the final stages of implementing the system across the organisation.

A standardised risk management approach across The Star will enable risks to be consistently identified, managed and communicated. Climate-related risks will be meaningfully compared to, and prioritised with, all of The Star’s risks and integrated into its overall risk profile and appetite. The Star is committed to proactively and systematically managing the risks within its business operations and embedding risk management in all business processes.

The risk management framework is consistent with the Australian/New Zealand Standard (AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines). It will be reviewed every year and approved by the Board every two years.

Details of The Star’s major risks and associated mitigation strategies are set out within the Directors Report of the company’s 2020 Annual Report. The mitigation strategies are designed to reduce the likelihood of the risk occurring and/or to minimise the adverse consequences of a potential event. However, some risks are affected by factors external to, and beyond the control of, The Star.

Risk Management Framework

The Star’s Risk Management Framework comprises of seven steps:

- 1. Establish the context:** The Star considers the full range of underlying assumptions that underpin its business and strategic objectives, to determine the potential risks that might affect The Star’s business and strategic objectives.
- 2. Risk identification:** The Star identifies potential sources of risk, areas of impact, events that could happen and the potential causes and consequences of risk events to The Star. This includes any risks associated with not doing something including, for example, not implementing climate change adaptation measures.
- 3. Risk analysis:** The Star analyses each risk to understand it, factors the risk into decision-making processes, evaluates it against The Star’s risk appetite and effectively treats the risk. This includes assessing the consequences, likelihood, the effect and reliability of existing controls in place to reduce the risk and identifying

TCFD RECOMMENDED DISCLOSURE	STATUS
RM1. Describe The Star’s processes for identifying and assessing climate-related risks	● <i>established</i> - <i>continue and improve</i>
RM2. Describe The Star’s processes for managing climate-related risks	● <i>established</i> - <i>continue and improve</i>
RM3. Describe how processes for identifying, assessing and managing climate-related risks are integrated into The Star’s overall risk management	● <i>established</i> - <i>continue and improve</i>

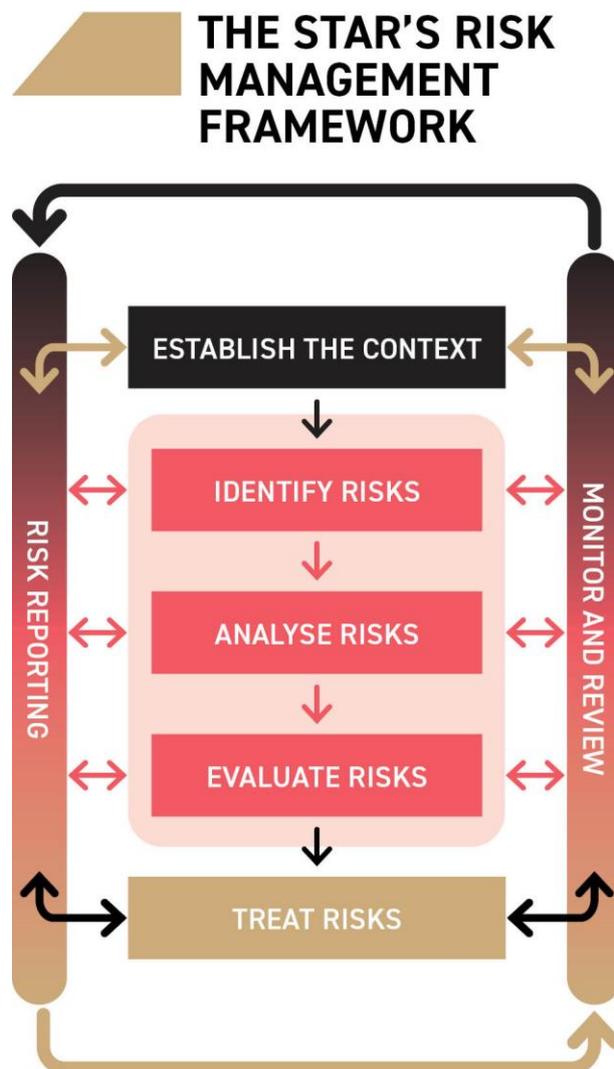


Figure 6 The Star’s Risk Management Framework

potential risk treatments. The Star has developed its consequence, likelihood and control effectiveness criteria.

4. **Risk evaluation:** The risk analysis provides The Star with an overall risk rating for each risk. The rating of each risk is determined using The Star’s risk matrix. The risk ratings are evaluated to assist The Star in determining the priorities for risk treatment and whether a risk is within The Star’s risk appetite.
5. **Risk treatment:** Risks which have a risk rating considered to be unacceptably high are treated to modify the level of risk. Risks are treated by taking steps to reduce the magnitude of the potential consequences of a risk event; and/or likelihood of those consequences occurring. The objective of this step is to reduce risk(s) to a level which is within The Star’s risk appetite.
6. **Risk reporting:** Group Legal & Risk is responsible for preparing reports to the Board’s relevant sub-committees. Climate-related risks are reported to the Board People, Culture and Social Responsibility Committee. Each business unit is responsible for providing information about its material climate-related risks and related risk treatment plans so that Group Legal & Risk can prepare reports. For details on external reporting and governance of The Star’s climate-related risks please refer to Section 2.0 Governance.
7. **Monitoring and review:** All aspects of this Risk Management Framework are continuously monitored and regularly reviewed to ensure that The Star’s risk profile remains current and the controls in place remain current.

The Star’s Risk & Compliance System

In 2020, The Star transitioned from an Excel based risk record to an enterprise-wide Risk & Compliance System that is easily accessed. It is aligned to the Risk Management Framework. During 2020, The Star’s Risk Team converted all current risk records into the Risk & Compliance System, to establish it as the single source of all core risk information for the organisation.

The transition to the enterprise wide Risk & Compliance System will allow The Star real time access to add and modify risks and actions as they arise and provide more flexibility and transparency to senior leaders, risk decision makers and action owners. It provides the ability to track actions through a central resource accessible to leaders and provide dashboard reporting to risk owners within the organisation.

The ‘Risk record’ within the Risk & Compliance System, is mapped to each step of the Risk Management Framework. Each risk has a unique ID and key words, which can be used to search for specific risks. Climate-related risks are tagged with ‘Environment’ as a key word. The Risk & Compliance System allows users to view risks in varying levels of detail, including user dashboards. A range of risk reports can be generated for governance, monitoring and review purposes.

The organisation is already familiar with the new Risk & Compliance System as it used for incident reporting. However, to ensure that it is properly utilised to capture risks, and for reporting, The Star has developed user training which was delivered in early 2021 across the business. The Risk Team have presented the system to the Board which will allow for the Board and The Star more widely to continuously review risks, seek data and report on risks.

Roadmap to further alignment to the TCFD Recommended Disclosures

ACTIONS FOR THE STAR TO UNDERTAKE	RELEVANT TCFD DISCLOSURE(S)	TIMELINE
The Star will continue training on the Risk & Compliance System across the organisation as required.	RM1, RM2, RM3	FY22
The Star will communicate how it prioritises the actions to respond to climate- related risks, in line with other business considerations.	RM1, RM3	FY22

ACTIONS FOR THE STAR TO UNDERTAKE	RELEVANT TCFD DISCLOSURE(S)	TIMELINE
The Star will periodically review adaptation actions from the physical risk assessments and update the Sustainable Design and Operational Standards as appropriate to strengthen the resilience of future construction and development projects.	RM2	FY22
Review effectiveness of the Risk & Compliance System and The Star's risk management and governance processes in managing climate-related risks.	RM3	FY22
Collaborate with supply chain partners, including utility providers, to understand and address system interdependencies and potential risks that may arise from climate-related events.	RM1, RM2, RM3	FY22+
Liaise with insurers to demonstrate proactive measures to reduce risk associated with material climate impacts, through adoption of property-based adaptation actions.	RM1, RM3	FY22+
The Star will look to engage with key stakeholders and its supply chain to encourage better climate-related disclosure within the tourism and gaming industry, and to improve our internal ability to respond to climate risks. The Star will review opportunities to investigate certain specific risks, such as the impact of heat waves on patron behaviour.	RM3	FY22+

5.0 Metrics and Targets

Disclose the metrics and targets used to assess and manage The Star’s relevant climate-related risks and opportunities, where such information is material.

The Star has committed to a low carbon future by setting a target to achieve net-zero carbon emissions for its wholly owned and operated assets by 2030 as a long term measure. An interim carbon target is in place to achieve a 30% reduction from 2013 – 2023 on an intensity basis.

The Star has operational resource plans for each property to measure progress and consumption. Due to the COVID-19 pandemic and subsequent restrictions which included reduced capacity and venue closures, The Star’s operations reduced in 2020. This has led to a significant reduction in The Star’s carbon emissions, energy use and water consumption declined during this period. During the 2020 closure period, carbon emissions and energy use generally halved during April and May (Gold Coast, Sydney, Gold Coast Convention Centre and 60 Union St) and reduced by approximately 35% at The Star Brisbane. The Government mandated health restrictions are expected to be in place well into 2021.

Emissions and Energy Performance

In FY20, the Group’s total emissions in carbon dioxide equivalents (CO2-e) from purchased gas and electricity were 94,945 tonnes. This footprint equates to a decrease of 11.1% from FY19 which was 106,845 tonnes and an overall decrease of 12.6% from base year FY13 which was 108,595 tonnes. The Star’s FY20 emissions were comprised of 8,952 Scope 1 emissions and 85,993 Scope 2 emissions.

On an intensity basis, carbon emissions per square metre decreased by 12.6% from 0.35 tonnes CO2-e per square metre in FY19 to 0.31 tonnes CO2-e per square metre in FY20.

Overall carbon emissions intensity per square metre reduced by 26.2% in FY20 from FY13 contributing positively to the Group’s target to achieve a 30% reduction in emissions intensity per square metre by FY23 against base year FY13. With 14 million visitors in FY20 (down from previous years due to the COVID-19 pandemic) carbon emissions intensity on a per visitor basis increased from 5.69 kilograms CO2-e per visitor in FY19 to 6.38 kilograms CO2-e per visitor in FY20 which is expected to decline in FY21 when venues reopen fully and operations return to more normal levels.

The Group’s total energy consumption from purchased gas and electricity for FY20 was 555,911 gigajoules (GJ), which was a 13.1% decrease from FY19 which was 639,726 GJ and an 8.5% decrease from base year FY13. On an intensity basis, energy per square metre reduced by 14.5% from 2.11 GJ per square metre in FY19 to 1.80 GJ per square metre in FY20 and decreased by 22.7% against base year FY13. Energy consumption per visitor increased in FY20 by 9.8% from 34.05 MJ per visitor in FY2019 to 37.38 MJ per visitor in FY20, as a result of reduced visitation due to COVID-19 impacts.

Energy consumption per visitor increased 0.4% overall from base year FY13 and is expected to reduce again in FY21 when The Star’s properties return to more normal operating levels.

TCFD RECOMMENDED DISCLOSURE	STATUS
MT1. Disclose the metrics used by The Star to assess climate-related risks and opportunities in line with its strategy and risk management process	● established - continue and improve
MT2. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 Greenhouse gas (GHG) emissions, and the related risks	● established - continue and improve
MT3. Describe the targets used by The Star to manage climate-related risks and opportunities, and report performance against targets	● initiated – continue and improve

METRIC	FY19	FY20	VARIANCE
Energy	639,726	555,911	83,815 (GJ) (-13.1%)
Carbon emissions (tonnes)	106,845	94,945	11,900 tonnes (- 11.1%)

The decline in carbon emissions and energy consumption both on an absolute and intensity basis was expected due to property closures and restricted operations between March and June 2020 in line with Government regulations. Both large scale plant upgrades and energy efficiency initiatives in the Group’s Energy and Water Project Pipeline were delivered between July 2019 and March 2020 contributing to the energy and carbon emissions reductions within the year.

CARBON EMISSIONS

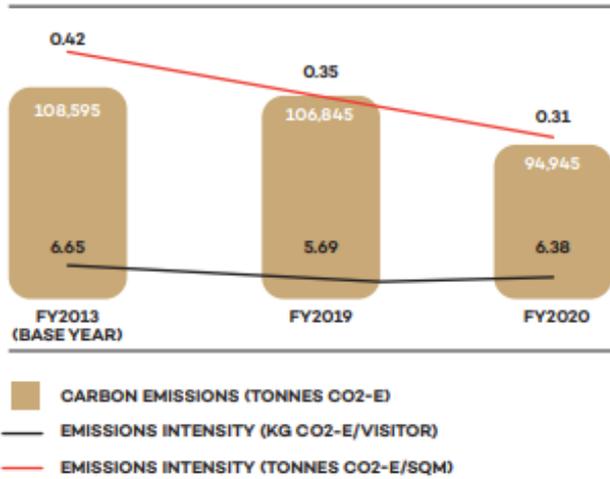


Figure 8 The Star’s FY2020 total carbon emissions and intensity, in comparison with the base year (FY2013) and the previous year (FY2019)

ENERGY CONSUMPTION

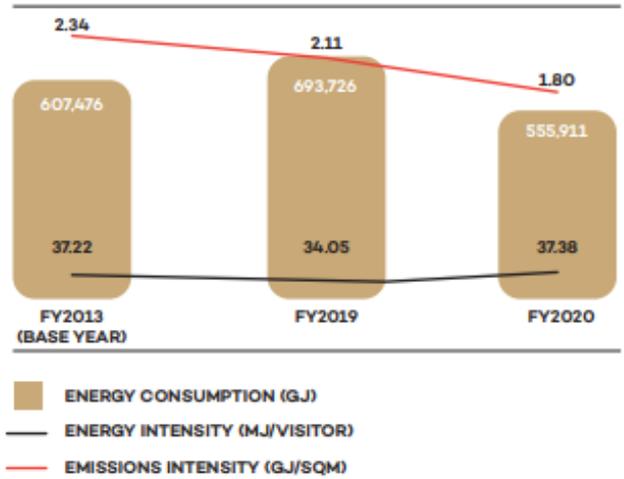


Figure 7 The Star’s FY2020 total energy consumption and intensity, in comparison with the base year (FY2013) and the previous year (FY2019)

Material Scope 3 emission sources

In 2020, The Star completed a Scope 3 materiality assessment based on financial spend to identify its material Scope 3 emission sources. The Star’s four largest emission sources are upstream from its supply chain and are:

TYPE	EMISSION SOURCE	PROPORTION OF EMISSIONS
Capital goods	Building contract works	26%
Purchased goods and services	Meat for hospitality purposes	11%
	Marketing for agents and acts	4%
	Dry Goods Grocery for hospitality purposes	4%

Resource consumption boundary and assurance

The Star reports under the National Greenhouse and Energy Reporting ('NGER') Act 2007 for all facilities within The Star's operational control⁶. The Star reports on and receives assurance of the following metrics⁷, for the year ended 30 June 2020:

- Total Scope 1 GHG emissions (tonnes of carbon dioxide equivalent (tCO2-e))
- Total Scope 2 GHG emissions (tonnes of carbon dioxide equivalent (tCO2-e))
- Total energy consumed for The Star (expressed in gigajoules (GJ)).

Roadmap to further alignment to the TCFD Recommended Disclosures

ACTIONS FOR THE STAR TO UNDERTAKE	RELEVANT TCFD DISCLOSURE(S)	TIMELINE
The Star will consider the appropriateness of other metrics and targets, such as assessment of avoided GHG emissions through life cycle assessment or developing revenue or procurement goals for products/services designed for a low carbon economy.	MT1, MT2	FY22
Report on the cost savings from HVAC and/or building envelope upgrades at the Queen's Wharf and Sydney corporate office (addressing the risk of extreme heat) as per the energy efficiency projects listed in the Annual Report.	MT3	FY22
Investigate opportunities to roll out rainwater capture / harvesting across the portfolio of assets to reduce potable water requirements for cooling demand and reduce costs for operations.	MT3	FY22
The Star will review its near-term reduction targets to ensure alignment with the longer-term vision of achieving net-zero emissions by 2030.	MT1, MT2	FY22+
The Star will investigate ways to quantify and report on the impact of physical climate risks, including how planning measures can reduce recovery costs and lost revenue.	MT3	FY22+

⁶ The Star's Basis of Preparation can be found on the company website: <https://www.starentertainmentgroup.com.au/wp-content/uploads/2021/03/FY2020-Basis-of-Preparation.pdf>

⁷ The Star's Assurance Report can be found on the company website: <https://www.starentertainmentgroup.com.au/wp-content/uploads/2021/03/FY2020-EY-Assurance-Opinion.pdf>